

REMARKS

Entry of the foregoing amendments and reconsideration of this application is respectfully requested. A request for a one month extension of time is attached hereto. The specification has been amended to respell a word used in the BACKGROUND OF THE INVENTION. Also, formal drawings have been submitted to the Chief Draftsman in response to the Examiner's objection and request for formal drawings. Claim 11 has been amended to rectify an inadvertent typographical error. Claims 1-29 remain in the application.

Claims 1, 10-12, 20-22, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al. (U.S.P. 6,374,021) in further view of Kuhara et al. (U.S.P. 5,787,215) and Hauer et al. (U.S.P. 5,696,862). Applicants respectfully traverse this rejection.

Claims 1, 12, and 22 are all independent claims in this group. Claims 10 and 11 depend on claim 1, claims 20 and 21 depend on claim 12 and claim 29 depends on claim 22. Referring to claim 1 for example, "a light source designed to produce a beam of light" and "a lens system positioned to receive the beam of light" are specified. Also, the lens system includes "an optical element" with "a light reflecting surface". The claim further includes "a monitor

diode connected to the drive electronics" and specifies that the light reflecting surface is "positioned to reflect a portion of the beam of light onto the monitor diode."

Here it should be noted that a portion of the main beam from the light source is reflected to the monitor diode. Many vertical cavity surface emitting lasers ((VCSELs) are constructed so that they do not emit light from the rear surface. Also, when monitoring light emitted from the rear surface of a laser, for example, changes can occur in the light monitoring path that do not affect the amount of light emitted in the main path. Thus, for example, a monitor diode positioned in the rear emission path of a laser might call for more power, thus damaging the laser, even though the monitor diode itself is the problem.

Referring to Nakanishi et al., all of their embodiments disclose monitor diodes situated in the path of light emitted from the rear of the laser. Thus, Nakanishi et al. do not disclose a system in which a monitor diode receives a portion of the light emitted in the main or forward beam.

Turning to the disclosure of Kuhara et al., it must be noted that there system includes two diodes. A special diode, designated 64, is constructed to allow the main beam

of light from the laser to pass through and into an optical fiber. Diode 64 is sensitive to light received from the optical fiber. In other words, diode 64 (referred to as a "wavelength selective photodiode) is the light receiver while laser 70 is the transmitter (see column 21, lines 30-60). A second photodiode 85 is provided in a rear beam of laser 70 to provide the monitoring function (Column 23, lines 13-20). Thus, Kuhara et al. do not disclose a system in which a monitor diode receives a portion of the light emitted in the main or forward beam.

Referring to Hauer et al., a monitor diode associated with the laser is disclosed, which receives light from the rear of the diode that has been reflected a plurality of times. Thus, Hauer et al. do not disclose a system in which a monitor diode receives a portion of the light emitted in the main or forward beam.

None of Nakanishi et al., Kuhara et al., or Hauer et al. disclose a light source and a lens system positioned in the main beam of the light source with an optical element of the lens system having a light reflecting surface positioned to reflect a portion of the main beam onto a monitor diode. Since none of the applied references individually disclose a monitor diode positioned to receive a portion of the main

beam of a light source for monitoring purposes, combining the references could not possibly suggest such structure to one of ordinary skill in the art. While claim 1 has been quoted for example, all of the remaining claims are similarly worded. Thus, applicants believe that claims 1, 10-12, 20-22, and 29 are not obvious in view of any proper combination of Nakanishi et al., Kuhara et al., or Hauer et al.

Claims 2-9, 13-19, and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al. (U.S.P. 6,374,021) in view of Kuhara et al. (U.S.P. 5,787,215) and Hauer et al. (U.S.P. 5,696,862) and in further view of Togami et al. (U.S. Patent Publication 2003/0053222). Applicants respectfully traverse this rejection.

As shown in detail above, None of Nakanishi et al., Kuhara et al., or Hauer et al. disclose a light source and a lens system positioned in the main beam of the light source with an optical element of the lens system having a light reflecting surface positioned to reflect a portion of the main beam onto a monitor diode.

Referring to Togami et al., no monitor diode associated with the laser is disclosed. Photodiode 304 is a receiver that receives signals from a remote source and provides no monitoring function for laser diode 302. Thus, Togami et al. do not disclose a system in which a monitor diode receives a portion of the light emitted in the main or forward beam.

Since none of Nakanishi et al., Kuhara et al., Hauer et al., or Togami et al., individually disclose a monitor diode positioned to receive a portion of the main beam of a light source for monitoring purposes, combining the references could not possibly suggest such structure to one of ordinary skill in the art. Thus, applicants believe that claims 2-9, 13-19, and 23-28 are not obvious in view of any proper combination of Nakanishi et al., Kuhara et al., Hauer et al., or Togami et al.

SUMMARY

Since none of the applied references disclose apparatus similar to applicant's claimed structure and since none of the applied references can achieve the functions of the present invention, applicant believes that claims 1-29 are in condition for allowance.

Should there be any questions or remaining issues regarding the foregoing, Examiner is cordially invited to telephone the undersigned attorney for a speedy resolution.

Respectfully requested,

A handwritten signature in black ink, appearing to read "Robert A. Parsons", written in a cursive style.

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